Science Year 7	**Curriculum intent:** The year 7 curriculum will consolidate and build on the key themes studied at KS2. Students will study aspects of Biology, Chemistry and Physics which have been carefully selected to build on prior knowledge through the big scientific ideas theme. Opportunities to revisit key concepts through retrieval practice have been built into the curriculum as well as consolidation exercises in order to maximise retention of key knowledge. Whenever possible knowledge and skills are acquired through the use of carefully planned practical activities with an emphasis on an investigative approach. Key skills will be developed with repeated practice, increasing appropriately in demand. Students will develop understanding of key concepts and will be given the opportunity to demonstrate this in a range of different contexts.				
Rotation	**1**	**2**	**3**	**4**	**5**
Interleaving	Key knowledge from previously studied topics	Key knowledge from previously studied topics	Key knowledge from previously studied topics	Key knowledge from previously studied topics	Key knowledge from previously studied topics
Knowledge	cells Particle model Forces	Human reproduction Separating mixtures Energy Costs	Variation Acids and alkalis Electricity	Interdependence Metals and non-metals Friction and energy stores	Rocks Space
Understanding	Apply knowledge in a range of different contexts. Opportunities to include investigating: The effect of temperature on diffusion The forces acting in a range of situations The structure of cells using microscopes	Apply knowledge in a range of different contexts. Opportunities to include: Identifying key events on a diagram of the female reproductive system Explaining the advantages and disadvantages of different energy resources Using particle diagrams to Show how sugar dissolves in tea	Apply knowledge in a range of different contexts. Opportunities to include: How neutralisation reactions are used in range of situations. Using a model to explain electrical circuits. Plotting bar charts or line graphs to show continuous or discontinuous variation.	Apply knowledge in a range of different contexts. Opportunities to include: Combining food chains to form food webs. Using the reactivity series to make predictions about the potential outcomes of displacement reactions Investigating friction.	Apply knowledge in a range of different contexts. Opportunities to include: Constructing a labelled diagram to identify the processes of the rock cycle. Describing how the earth`s tilt results in the different seasons
Skills	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary
Assessment	End of rotation test	End of rotation test	End of rotation test	End of rotation test	Science skills and key knowledge assessment